

## **Newsletter Article -- DRAFT --**

What's all this talk about digital television, high definition television, transition dates and new TV sets?

Those are questions many of us are asking ourselves these days. Now that Congress has set a February 17, 2009, date for the completion of the "DTV transition," what do we need to do?

Viewers who currently get their signals "over the air," using a rooftop antenna or rabbit ears, will have to make some adjustments. Either they will have to obtain a converter box to change the digital signal to analog, or they will have to buy a digital television set.

If you are a cable or satellite customer, you may need a set-top box to receive DTV signals and convert them into the format of your current analog television, even after the DTV transition is complete. A DTV set-top box also may receive multicast channels and high definition programming and display them in analog picture quality. Check with your cable or satellite provider to determine if and when you will need a set-top box.

Beginning in 2008, U.S. households may be able to obtain up to two coupons worth \$40 each toward the purchase of converter boxes. The program will be run by the National Telecommunications and Information Administration, which will issue rules regarding the coupons in the future.

You might be wondering why the country is "going digital." There are two important reasons. The sound and picture quality of digital television is much better. It is equivalent to CD quality sound and video. The second reason is that digital technology is a much more efficient use of the electromagnetic spectrum than analog technology. Spectrum freed up by the transition will be transferred to public safety uses and will provide spectrum for advanced wireless applications.

Those who do opt to go digital will have a transformed television viewing experience. Images and sound are captured using digital technology, delivering a movie-quality experience, multicasting and interactive capabilities. That means better quality, more choices, and more control over your television. There are many quality levels of digital television programming. The most common are:

### **High Definition TV (HDTV)**

HDTV in widescreen provides the highest resolution and picture quality of all DTV formats. A current analog TV picture is made up of 480 horizontal lines. An HDTV picture can have up to 1080 lines, allowing for sharp picture detail. The most common formats are 720p ("p" stands for progressive scan) and 1080i ("i" stands for interlaced) with either 720 progressively (non-interlaced) scanned lines

or 1080 interlaced lines. Combined with digitally-enhanced sound technology, HDTV achieves a new benchmark for sound and picture quality in television.

### **Enhanced Definition TV (EDTV)**

EDTV is a step up from analog TV and SDTV. Also called 480 progressive (480p), EDTV is widescreen 16x9 aspect ratio (Aspect ratio is a screen's width compared to its height.) or traditional 4x3 format and provides better picture quality than SDTV, but not as good as HDTV. Most DVDs are encoded as 480p (which means they are not available in high definition, yet).

### **Standard Definition TV (SDTV)**

SDTV is the baseline display and resolution for both analog and digital. Transmission of SDTV is usually in the traditional 4x3 aspect ratio, but may be widescreen 16x9 format. SDTV and analog TV can deliver up to 480 interlaced (480i) resolution, though it's often much lower.

So, American consumers will have some decisions to make between now and February 17, 2009. Should I make the investment in a digital television set or continue receiving a lower quality analog picture and sound (either through my cable or satellite provider or through a converter box)? What questions should I ask when I am shopping around for a new television set? What programming is currently available in digital format in my area?

To answer these and many other questions and to help us navigate the digital transition, the government has an excellent, user-friendly Web site at [www.dtv.gov](http://www.dtv.gov).

February 17, 2009, will be here before we know it and, with a little planning, we can all enjoy the many benefits that digital television will bring.